

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003846**Date Inspected:** 06-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG and Tower**Summary of Items Observed:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

OBG Sub-Assembly Bay 1

The Quality Assurance Inspector observed ZPMC performing fit-up and tack welding operations to Deck Panel DP-550-001 utilizing the gas metal arc and flux cored arc welding process. This panel is designed with closed ribs and plate stiffeners. On several of the five plate stiffeners, numerous torch notches were observed on the cut edges.

ZPMC relayed they would blend the torch notches that were less than 5 millimeters in depth utilizing a grinder and perform weld repairs to notches greater than 5 millimeters in depth. Below is a digital photograph illustrating a torch notch measuring approximately 10 millimeters in depth.

Deck Panel Production Welding

The Quality Assurance Inspector observed no welding of production deck panels on this shift.

Tower Assembly Bay 1**South Tower, Skin B, Lift 1**

The Quality Assurance Inspector observed the skin plate on in a jig, lying horizontally. Several ZPMC employees were observed grinding the profiles of the partial and complete joint penetration welds joining the longitudinal stiffeners to the skin plate.

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South Tower, Skin C, Lift 1

The Quality Assurance Inspector observed ZPMC performing in process flux cored arc welding on the semi automated gantry to produce the complete joint penetration weld joining the longitudinal stiffeners to skin plate.

South Tower, Skin E, Lift 1

The Quality Assurance Inspector observed the skin plate on in a jig, lying horizontally. Several ZPMC employees were observed grinding the profiles of the partial and complete joint penetration welds joining the longitudinal stiffeners to the skin plate.

Tower Assembly Bay 2

East Tower, Skin D, Lift 1

The Quality Assurance Inspector observed ZPMC performing in process flux cored arc welding on the semi automated gantry to produce the complete joint penetration weld joining the longitudinal stiffeners to skin plate.

East Tower, Skin C, Lift 1

The Quality Assurance Inspector observed ZPMC performing fit up and tack welding operations joining the longitudinal stiffeners to skin plate.

East Tower, Skin A, Lift 1

Idle

East Tower, Skin B, Lift 1

The Quality Assurance Inspector observed two ZPMC employees performing back gouging operations utilizing the air carbon arc gouging process and grinders in preparation for welding the longitudinal stiffeners to skin plate connection.



Summary of Conversations:

As stated in the contents of the above report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco(707) 552 7715, who represents the Office of Structural Materials for

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your project.

Inspected By:	Bertlesman,Greg
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Quality Assurance Inspector

Reviewed By:	Lanz,Joe
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QA Reviewer
